

IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (ORIGINAL), (CURRENTLY AMENDED), (CANCELLED), (WITHDRAWN), (NEW), (PREVIOUSLY PRESENTED), (PREVIOUSLY ADDED) or (NOT ENTERED).

Please CANCEL claims 1, 2 and 7, AMEND claims 3 and 6 and ADD new claims 8-10 in accordance with the following:

1. (CANCELLED)

2. (CANCELLED)

3. (CURRENTLY AMENDED) The A numerical controller of claim 1 having a numerical control section that outputs movement commands and a motor control section that controls motors according to the movement commands from the numerical control section, the numerical controller comprising:

an interface unit receiving signals from sensors and sending the received signals to the motor control section; and

a data table storing a correspondence between the sensors and the motors,

wherein the motor control section receives the signals from a plurality of sensors through the interface unit and controls one motor corresponding to the plurality of sensors according to the correspondence between the sensors and the motors set in the data table, and wherein

an emergency stop signal is associated with the motors as one of the sensor signals.

4. (ORIGINAL) A numerical controller in which a plurality of servo amplifiers and one interface unit or a plurality of interface units are interconnected through a serial bus in a daisy chain fashion, the numerical controller comprising:

a plurality of servo motors controlled by the plurality of servo amplifiers;

a plurality of sensors, including a sensor that senses the position of a movable part driven by at least one of the servo motors; and

a memory storing a data table in which one or more of the sensors in the plurality of

sensors are assigned to each of the plurality of servo motors; wherein:

the interface unit receives a plurality of signals from the sensors and sends the plurality of signals to the numerical controller; and

the numerical controller receives the signals sent from the plurality of sensors through the interface unit sequentially, identifies a sensor that has sent each of the signals according to an order of reception of the signals, determines a servo motor corresponding to the identified sensor with reference to the data table, and controls the determined servo motor according to the signal received from the sensor.

5. (ORIGINAL) The numerical controller of claim 4, wherein the sensors include at least one of a linear scale that senses the position of a table driven by a servo motor, a sensor that senses a temperature, a pressure, a voltage, or a current, and a limit switch.

6. (CURRENTLY AMENDED) The A numerical controller of claim 2 having a numerical control section that outputs movement commands and a motor control section that controls motors according to the movement commands from the numerical control section, the numerical controller comprising:

an interface unit receiving signals from sensors and sending the received signals to the motor control section; and

a data table storing a correspondence between the sensors and the motors,
wherein the motor control section receives the signals from a plurality of sensors through
the interface unit and controls one motor corresponding to the plurality of sensors according to
the correspondence between the sensors and the motors set in the data table,

the correspondence between the sensors and the motors is n-to-one (n being an integer
greater than or equal to two), and wherein

an emergency stop signal is associated with the motors as one of the sensor signals.

7. (CANCELLED)

8. (NEW) A numerical controller having a numerical control section that outputs movement commands and a motor control section that controls motors according to the movement commands from the numerical control section, the numerical controller comprising:

an interface unit receiving signals from sensors and sending the received signals to the motor control section; and

a data table storing a correspondence between the sensors and the motors,
wherein the motor control section receives the signals from one sensor through the
interface unit and controls a plurality of motors corresponding to the one sensor according to the
correspondence between the sensors and the motors set in the data table, and
an emergency stop signal is associated with the motors as one of the sensor signals.

9. (NEW) A numerical controller having a numerical control section that outputs movement commands and a motor control section that controls motors according to the movement commands from the numerical control section, the numerical controller comprising:
an interface unit receiving signals from sensors and sending the received signals to the motor control section; and
a data table storing a correspondence between the sensors and the motors,
wherein the motor control section receives the signals from the sensors through the interface unit and controls the motors corresponding to the sensors according to the correspondence between the sensors and the motors set in the data table, and
an emergency stop signal is associated with the motors as one of the sensor signals.

10. (NEW) A numerical controller having a numerical control section that outputs movement commands and a motor control section that controls motors according to the movement commands from the numerical control section, the numerical controller comprising:
an interface unit receiving signals from sensors and sending the received signals to the motor control section; and
a data table storing a correspondence between the sensors and the motors,
wherein the motor control section receives the signals from the sensors through the interface unit and controls the motors corresponding to the sensors according to the correspondence between the sensors and the motors set in the data table,
the correspondence between the sensors and the motors is one-to-one, one-to-n, or n-to-one (n being an integer greater than or equal to two), and
an emergency stop signal is associated with the motors as one of the sensor signals.